WHAT IS CLAIMED IS:

1. A laser manipulation system for controllably moving a laser head relative to a surface of an inhabitable structure and irradiating the surface with laser light from the laser head, the laser manipulation system comprising:

a positioning mechanism coupled to the laser head, the positioning mechanism comprising:

a first-axis position system adapted to move the laser head along a first direction substantially parallel to the surface; and

a second-axis position system coupled to the first-axis position system and adapted to move the laser head along a second direction substantially parallel to the surface; and

an anchoring mechanism coupled to the positioning mechanism and releasably coupled to the structure.

2. The laser manipulation system of Claim 1, wherein the second direction is substantially perpendicular to the first direction.

3. The laser manipulation system of Claim 1, wherein the first-axis position system and the second-axis position system provide linear movement of the laser head.

4. The laser manipulation system of Claim 1, wherein the first-axis position system and the second-axis position system provide circular and axial movements of the laser head.

5. The laser manipulation system of Claim 1, wherein the positioning mechanism is releasably coupled to the laser head, the second-axis position system is releasably coupled to the first-axis position system, and the anchoring mechanism is releasably coupled to the positioning mechanism, whereby the laser manipulation system can be reversibly assembled and disassembled to facilitate transportation of the laser manipulation system to locations within the structure.

6. The laser manipulation system of Claim 1, further comprising a controller electrically coupled to the positioning mechanism and adapted to transmit control signals to the positioning mechanism in response to user input.

7. The laser manipulation system of Claim 1, wherein the first-axis position system comprises a first rail and a first drive and the second-axis position system comprises a second rail and a second drive.

8. The laser manipulation system of Claim 7, wherein the first rail is coupled to the anchoring mechanism, the second rail is slidably coupled to the first rail, and the laser head is slidably coupled to the second rail.

9. The laser manipulation system of Claim 7, wherein the first drive and the second drive are each selected from the group consisting of: hydraulic drive, pneumatic drive, electromechanical drive, screw drive, and belt drive.

10. The laser manipulation system of Claim 1, wherein the positioning mechanism further comprises a third-axis position system adapted to move the laser head along a third direction substantially perpendicular to the first direction and the second direction.

11. The laser manipulation system of Claim 1, wherein the anchoring mechanism comprises one or more attachment interfaces.

12. The laser manipulation system of Claim 11, wherein the attachment interface comprises at least one resilient vacuum pad.

13. The laser manipulation system of Claim 1, wherein the anchoring mechanism comprises a ground-based support connector adapted to be releasably attached to a ground-based support system.

14. The laser manipulation system of Claim 1, wherein the anchoring mechanism comprises a suspension-based support connector adapted to be releasably attached to a suspension-based support system.

15. The laser manipulation system of Claim 1, further comprising an interface which couples the second-axis position system to the first-axis position system, the interface comprising a hinge whereby a plane of movement defined by the first direction and the second direction of the laser head can be rotated relative to a surface upon which the anchoring mechanism is coupled.

16. A laser manipulation system for controllably moving a laser head relative to a surface of an inhabitable structure and irradiating the surface with laser light from the laser head, the laser manipulation system comprising:

means for positioning the laser head by moving the laser head along a first direction substantially parallel to the surface and along a second direction substantially parallel to the surface and substantially perpendicular to the first direction; and

means for releasably coupling the laser manipulation system to the structure.

17. A method of controllably moving a laser head relative to a surface of an inhabitable structure and irradiating the surface with laser light from the laser head, the method comprising:

releasably coupling the laser head to a laser manipulation system;

releasably coupling the laser manipulation system to the structure; and

controllably moving the laser head along a first direction substantially parallel to the surface and along a second direction substantially parallel to the surface and substantially perpendicular to the first direction.